

THE NOMENCLATURE OF *HETERONYCHUS SANCTAE-HELENAE* BLANCHARD
(COLEOPTERA: SCARABAEIDAE; DYNASTINAE).

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Synopsis.

Heteronychus sanctae-helenae Blanchard is an important pest of crops and grassland in coastal New South Wales. The reasons for the change of the name of the species by Arrow, in 1937, from *arator* F. to *sanctae-helenae* Blanchard, are examined. It is concluded that *H. sanctae-helenae* Blanchard is the valid name, while *arator* F., the type of which is in Kiel, must be transferred to the genus *Hybosorus*.

Heteronychus sanctae-helenae Blanch. is an important pest of crops and grassland along the New South Wales seaboard. Its distribution extends from Byron Bay in the north to Moruya in the south (Wallace, 1946). The species is a native of South Africa and was introduced into New South Wales about the year 1920, the first record of its occurrence being that of Gurney (1934). In Western Australia it was first observed in 1938 at Albany; it is now widespread in the Perth area. In 1949 it appeared in numbers in the neighbourhood of Adelaide.

The species (as an adult) is responsible for considerable damage to gramineous crops, especially maize, and to vegetable and florists' crops. It is troublesome in turfed areas such as golf greens and grass tennis courts. The importance of the pest in pastures is not known, but the larvae may well be an important factor in the decline of pasture grasses after drought.

Until 1937 this species was known in the literature and in collections as *Heteronychus arator* (F.), 1792. The later name, *Heteronychus sanctae-helenae* Blanchard, 1853, was adopted by Arrow in his Catalogue of Dynastinae of 1937, with *arator* Burmeister (*nec* Fabricius) as a synonym, implying that *arator* F. was a different species and that Burmeister had misidentified it.

The reason for this change was not immediately clear, as the specimen labelled *Geotrupes arator* in the Banks collection in the British Museum certainly belongs to the species which we now know as *sanctae-helenae*. Because of the importance of the species as a pest I have thought it advisable to investigate the matter and if possible to stabilize the change of name. Fabricius described many species from the Banks collection specimens, so that there was reason to believe that this specimen might be regarded as the type. Burmeister's redescription of *H. arator* F. is based on this specimen, as he states that he saw a specimen named by Fabricius, standing as *Geotrupes arator* in the Banks collection, and adds that this species was wrongly referred to *Hybosorus* by Illiger and Schönherr.

Prell (1936) states that the *Geotrupes arator* (F.) in the Fabrician collection in Kiel is a species of *Hybosorus*, and therefore is not even a Dynastid.

There are, therefore, two specimens of different species, one in the British Museum, one in Kiel, either of which might be considered to be the type of *arator* F. The choice must depend on the Fabrician description.

It is noteworthy that in the descriptions of the species immediately before and after that of *arator*, and elsewhere, Fabricius writes "Mus. Dom. Banks", indicating that the description is based on a specimen in the Banks collection. This is omitted in the case of *arator*, the implication being that the type is not in the Banks collection but elsewhere. In addition, the description states "Clypeus integer, subscaber". It is more likely that Fabricius would have described the clypeus of *H. sanctae-helenae* as "scaber".

The evidence therefore favours the acceptance of the specimen in Kiel as the type of *Scarabaeus arator* F. The species represented in the Banks collection then becomes *Heteronychus arator* Burmeister (*nec* Fabricius), 1847, but the continued use of the name *arator* in *Heteronychus* is inadmissible, as it is a secondary homonym. The next available name for the species, *Heteronychus sanctae-helenae* Blanchard, 1853, is therefore valid.

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